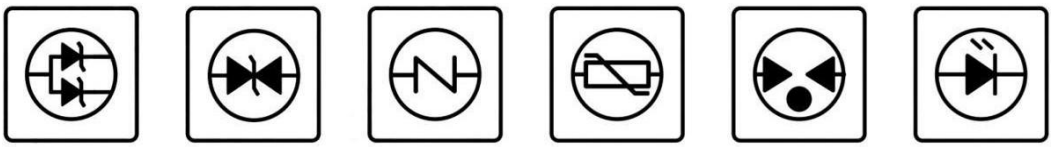
MSKSEMI 美森科
SEMICONDUCTOR



MSESDAVLC6V1-1BM2

Product specification

Features

- Small Body Outline Dimensions: nom 0.039″ x 0.024″ (1.0x0.6 mm)
- Low Body Height: nom 0.0 19″ (0.5 mm)
- Low Capacitance 8 pF
- Low ClampingVoltage
- Reverse Working (Stand-off) Voltage: 6 V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection
- This is a Pb-Free Device

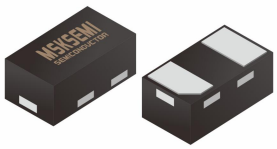
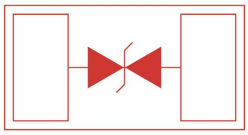
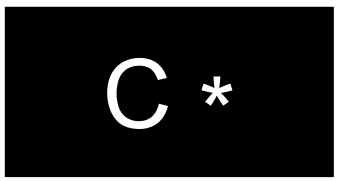
Mechanical Characteristics

- CASE: Void-free, transfer-molded, thermosetting plastic Epoxy Meets UL 94V-0
- LEAD FINISH: NiPdAu
- MOUNTING POSITION: Any
- QUALIFIED MAX REFLOW TEMPERATURE: 260°C
- Device Meets MSL 1 Requirements
- RoHS/ WEEE Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- MP3 Players

Reference News

PACKAGE OUTLINE	Pin Configuration	Marking
		
SOD-882		

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Maximum Ratings

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Contact		±30	kV
Peak Power Per 8 x 20μs Waveform	P_{PK}	70	W
Total Power Dissipation on FR-5① Board @ TA = 25°C	P_D	300	mW
Junction and Storage Temperature Range	T_J , T_{stg}	-55 to + 150	°C
Lead Solder Temperature - Maximum (10 Second Duration)	T_L	260	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Note1: FR-5 =1.0*0.75*0.062inch (25.4*19.05*1.58mm)

ELECTRICAL CHARACTERISTICS(TA = 25℃ unless otherwise noted)

P/N	V_{RWM} (V)	I_{R1}(μA) @ V_{RWM}	I_{R2}(μA) @ V_R=3.5V	V_{BR} (V) @ I_T (Note 2)		I_T	V_C (V) @ I_{PP} = 1 A (Note 3)	V_C (V) @MAX I_{PP} (Note 3)	I_{PP}(A) (Note 3)	P_{PK}(W) (Note 3)	C (pF)
	Max	Max	Max	Min	Max	A	Max	Max	Max	Max	Max
MSESDAVLC6V1-1BM2	6.0	0.5	0.3	5.6	8.0	1.0	9.8	12.5	5.5	69	8

1.Other voltage available upon request.

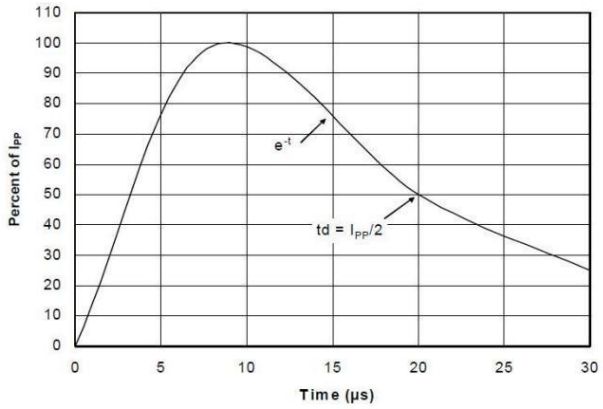
2. VBR is measured with a pulse test current IT at an ambient temperature of25℃

3. Surge current waveform per Figure 3.

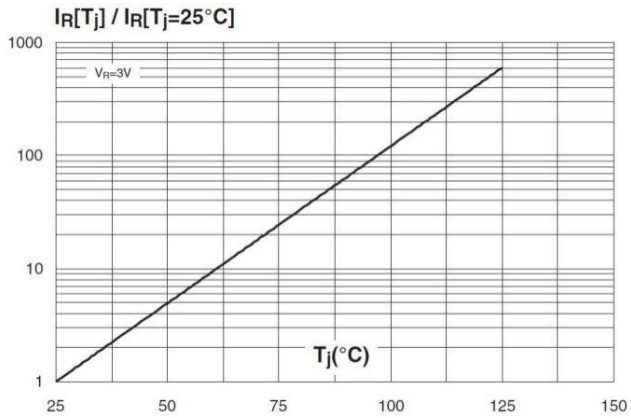
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TypicalCharacteristics@Ta=25℃unlessotherwisespecified

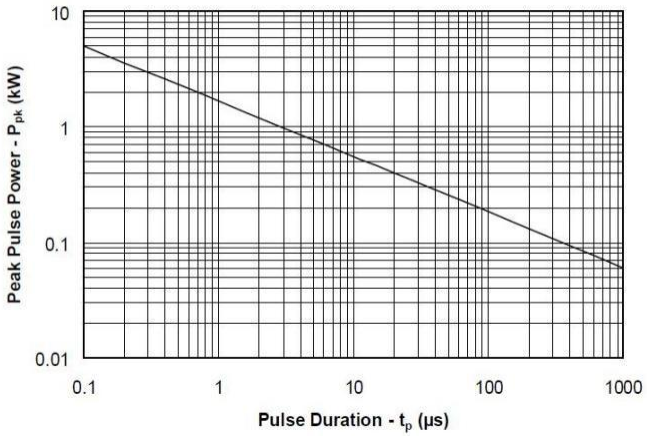
Pulse Waveform



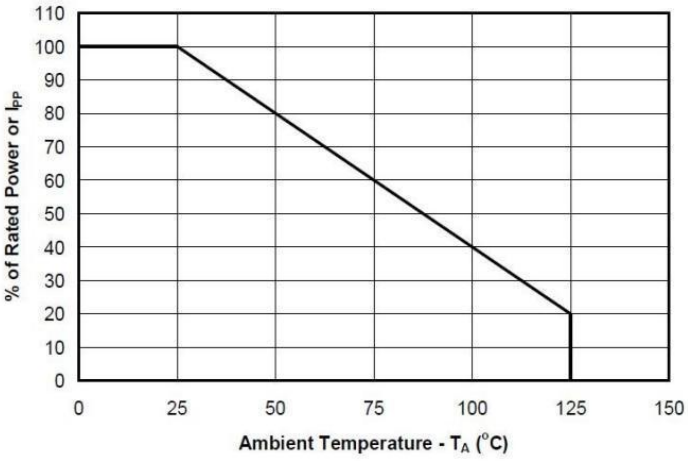
IR[Tj] / IR[Tj=25°C]



Non-Repetitive Peak Pulse Power vs. Pulse Time

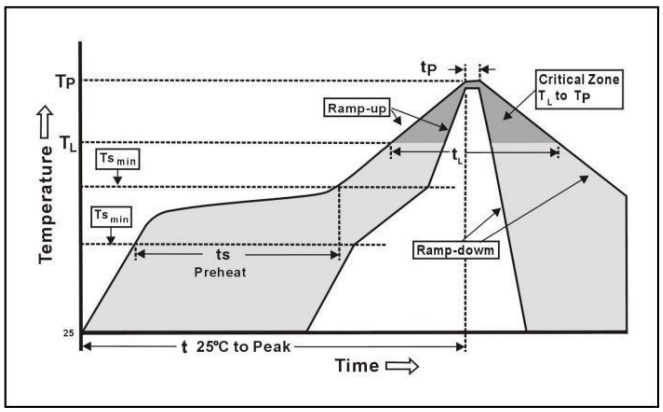


Power Derating Curve



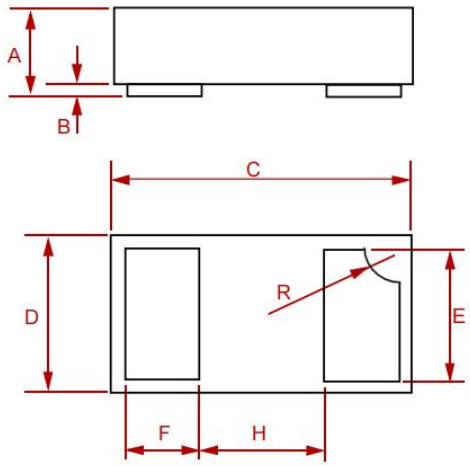
Soldering Parameters

Reflow Condition		Fb – Free assembly
Pre Heat	-Temperature Min ($T_{s(Min)}$)	150°C
	-Temperature Max ($T_{s(Max)}$)	200°C
	-Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{S(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	-Temperature (T_L) (Liquidus)	217°C
	-Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		$250^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-dowm Rate		6°C/second Max
Time 25°C to peak Temperature (T_p)		8 minutes Max.
Do not exceed		260°C



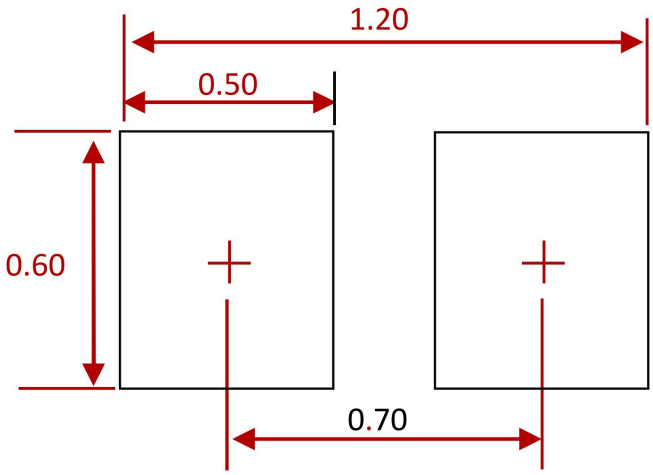
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PACKAGE MECHANICAL DATA



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.0125	0.02	0.32	0.52
B	0.000	0.002	0.00	0.05
C	0.037	0.043	0.95	1.080
D	0.022	0.027	0.55	0.680
E	0.016	0.024	0.40	0.60
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ.	
R	0.001	0.005	0.05	0. 15

Suggested Pad Layout



Note:

1.Controlling dimension:in millimeters.

2.General tolerance:±0.05mm.

3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MSESDAVLC6V1-1BM2	SOD-882	10000

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